REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-19 are currently pending. Claims 18 and 19 are hereby added. Claims 1 and 8 are independent and are hereby amended. No new matter has been introduced. Support for this amendment is provided throughout the Specification as originally filed.

Changes to the claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II. REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 1-17 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,959,210 to Nakamura in view of U.S. Patent Application Publication No. 2003/0092420 to Sugimoto et al. (hereinafter, merely "Sugimoto").

Independent claim 1, as amended, recites, *inter alia*:

"an antenna composed of:

. . .

connection means that is substantially flat having both a conductor line for supplying a high frequency signal to either one of said first ground conductor and said second ground conductor and signal lines for electrically connecting prescribed circuits respectively on said first ground conductor and said second ground conductor . . ." (emphasis added).

As understood by the Applicants, Nakamura discloses a portable radio having an antenna (12) adjacent a hinge (17) between an upper housing (1) and a lower housing (2). An S-shaped connection (16) provides for signal conductor connection between circuits in the respective housings. Current flow in the S-shaped connection (16) provides a load impedance to a high-frequency antenna current generated on the housings. FIGS. 6A-6B and col. 7, lines 45-59. The signal conductors can degrade antenna performance and Nakamura attempts to lessen this degradation. Col. 8, line 61 to col. 9, line 12. There is no suggestion that the signal conductors of Nakamura are part of the antenna. Thus, the S-shaped connector of Nakamura does not include both signal conductors and high-frequency conductors of the antenna.

Sugimoto discloses a high-frequency dielectric antenna. The antenna includes a dielectric substrate and a conductive meander line layer formed on the dielectric substrate. Abstract. There is no suggestion in Sugimoto that signal conductors are part of the antenna. Thus, the dielectric antenna of Sugimoto does not include both the high-frequency antenna conductors and signal conductors.

First, in contrast, claim 1 recites, "an antenna composed of . . .both a conductor line for supplying a high frequency signal to either one of said first ground conductor and said second ground conductor and signal lines for electrically connecting prescribed circuits respectively on said first ground conductor and said second ground conductor . . ." Thus, in the present invention the antenna includes both the signal conductors and the high-frequency conductor.

Claim 1 is patentable over the combination of Nakamura and Sugimoto because those reference taken alone or in combination do not teach or suggest each and every limitation recited in the claim. In particular, the references do not teach or suggest, "an antenna composed of . . .

both a conductor line for supplying a high frequency signal to either one of said first ground conductor and said second ground conductor and signal lines for electrically connecting prescribed circuits respectively on said first ground conductor and said second ground conductor" as recited in claim 1.

Second, there is no motivation to combine Nakamura and Sugimoto. Sugimoto does not disclose an antenna having signal conductors (as opposed to high-frequency antenna conductors). Thus, because Nakamura teaches the degradation of the antenna signal due to current flow in the signal conductors, there would be no reason to combine Sugimoto's high-frequency dielectric antenna (having no signal conductors) with Nakamura's signal conductors in the S-shaped connector.

For reasons similar or somewhat similar to those described above with regard to independent claim 1, independent claim 8 is also believed to be patentable.

III. NEW CLAIMS

New claims 17 and 18 provide specific locations for the high-frequency conductor. In claim 17, the high-frequency conductor is located on both a top and bottom surface of the substantially flat (claim 1) flexible printed circuit board (claim 2). FIG. 4. Similarly, in claim 18, the high-frequency conductor is located on both longitudinal edges of the substantially flat flexible printed circuit board. FIG. 25.

As discussed above, Nakamura does not teach or suggest a high-frequency conductor included with the signal conductors in the S-shaped connector (16). Additionally, it is clear that

at col. 7, line 45 to col. 8, line 16, where Nakamura discussed the structure of the connection, there is no teaching or suggestion that the high-frequency conductor of the antenna is located on both the top and bottom surfaces of the S-shaped flexible circuit connector. Similarly, the high-frequency conductor is not shown or described as located on the longitudinal edges of the S-shaped flexible circuit connector.

As discussed above, Sugimoto does not teach signal conductors co-located with the dielectric high-frequency antenna. Additionally, it is clear from FIG. 12a and pars. [0072]-[0073] that there is no teaching or suggestion in Sugimoto that the high-frequency antenna conductor is located on either both the top and bottom surfaces of the dielectric or both the longitudinal surfaces of the dielectric as recited in claims 18 and 19, respectively.

Thus, claims 18 and 19 are patentable over the Nakamura and Sugimoto references for the above discussed reasons as well.

IV. DEPENDENT CLAIMS

The other claims are dependent from one of the claims discussed above and are therefore believed patentable for at least the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

Claims 1-19 are in condition for allowance. In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references,

it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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